Technical Assistance Services for Communities
Contract No.: EP-W-07-059
TASC WA No.: TASC-4-HQ-OSRTI
Technical Directive No.: 2.02 TD #7rev. Passaic River

This Technical Assistance Services for Communities (TASC) report discusses a letter from the Cooperating Parties Group (CPG) to the National Remedy Review Board (NRRB). The letter, dated November 21, 2012, provides CPG comments regarding the revised Draft Remedial Investigation – Focused Feasibility Study (FFS) for the Lower Passaic River Study Area (LPRSA). The revised Draft FFS has been given to the NRRB for review, but has not yet been released to CPG, TASC or the public. A 2007 version of the Draft FFS is available at http://www.ourpassaic.org/EarlyAction.aspx .

TASC reviewed the CPG document for the Passaic River Community Advisory Group (CAG) with particular attention to issues of potential concern to the CAG. This TASC report briefly summarizes the contents of each section of the CPG document, provides TASC observations and outlines issues about which the CAG may want additional information. This report's contents do not necessarily reflect the policies, actions or positions of the Environmental Protection Agency (EPA).

In a letter to the NRRB and Contaminated Sediments Technical Advisory Group (CSTAG), the CPG indicates that it does not agree with any of the alternatives presented in the 2007 Draft FFS. The CPG also anticipates not agreeing with EPA's cleanup plan for the lower eight miles of the Passaic River and asks that the NRRB strongly recommend that EPA not issue the Revised Draft FFS study and fully consider the alternative remedy being developed by the CPG. The CPG is working on a remedial investigation/ feasibility study (RI/FS) for the entire 17 miles of the lower Passaic River. The RI/FS will be completed in 2015 according to the CPG.

Executive Summary
The executive summary of the CPG document states that "Region 2's proposal to issue the Draft FFS, which proposes a final remedy for eight of the 17 miles of the LPRSA, at a time when there is an ongoing remedial investigation/feasibility study (RI/FS) to select a remedy for the full 17 miles, is unprecedented and arbitrary and capricious." This appears to be an opinion about the legality of EPA actions. TASC does not address any issues about legality of any actions by any stakeholder.

The CPG further states:

> The Draft FFS: is inconsistent with the National Contingency Plan (NCP); flies in the face of current EPA principles and guidance for the management of contaminated sediments; fails to consider all available data collected and to be collected under the RI/FS; relies on an incomplete model that fails to replicate existing conditions or to produce reliable results and has not undergone peer review; and relies heavily on a flawed dredging pilot study, with the result that the predicted dredging production rates

are significantly over-stated and the resulting durations of the project are significantly under-estimated.

Section I – Background
Section I of the CPG document covers background information about the RI/FS efforts of the CPG and the EPA Draft FFS.

Section II – The Draft FFS is Scientifically and Technically Unsound Based Upon the Current Understanding of the River
Section II of the CPG document provides discussion of the CPG's opinion that the Draft FFS is scientifically and technically unsound based upon the current understanding of the river.

Page 17 of the comments describes the concerns that the CPG has about the options for disposing of dredged sediment:

> All three disposal options proposed in the Draft FFS present significant issues of implementability and impact on duration.
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> 1. Newark Bay CAD [confined aquatic disposal] - The permitting of CAD cells has historically been a lengthy and often unsuccessful process, particularly for sediments from environmental dredging. Moreover, EPA's Partner Agencies … and community stakeholders … have publicly objected to the placement of a CAD in Newark Bay. As a consequence, in addition to much longer project durations than estimated by Region 2, commencement of the entire project could be delayed by several years while gaining consensus, approval, permitting, siting and construction of a Newark Bay CAD, even if there is no litigation challenging the siting of a CAD. In reality, such litigation is highly likely.
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> 2. Off-site Disposal (Landfill) - There are currently no treatment facilities in the NY/NJ Harbor that are capable of dewatering or stabilizing 4.3 to 9.6 MM CY [million cubic yards] of contaminated sediment prior to off-site disposal in a landfill. Moreover, Region 2 has not demonstrated that the landfill capacity will be available over the 11-year estimated duration of the project or as much as 30 years that the project is estimated to require. There would also likely to be significant issues with siting a sufficiently large facility in the NY/NJ Harbor near rail facilities. The shortage of capacity is likely to be exacerbated by EPA's recent lowering of the threshold level for 2,3,7,8-Tetrachlorodibenzodioxin (TCDD).
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> 3. Beneficial Treatment Technologies - The CPG does not agree that local treatment and beneficial reuse (e.g., thermal treatment and sediment washing) are viable disposal alternatives for the volumes of sediment being considered by Region 2. It has never been demonstrated that these treatment processes will ever be available to successfully treat the volumes of LPRSA sediments at the sustained production rates required to meet Region 2's duration estimates. In fact, recent sediment washing tests conducted by the CPG at the request of Region 2 failed to show that they were effective in treating the contaminants of concern at RM [river mile] 10.9. Also, some

public stakeholders have expressed their opposition to the siting of a thermal treatment system in the Newark Bay area.

The CPG gives detailed criticism of the EPA FFS model as inconsistent with the EPA conceptual site model. The CPG's concerns include:

- The methods for FFS modeling of resuspended particles due to tidal action.
- Incomplete calibration and validation of the FFS contaminant fate and transport model.
- Lack of a calibrated bioaccumulation model.

Section III – The Draft FFS is Legally Indefensible
Section III of the CPG document presents arguments that the Draft FFS is legally indefensible. TASC does not provide legal advice.

Section IV – The NRRB/CSTAG Should Strongly Recommend that Region 2 Consider the Alternative Remedy as a Superior Alternative to the Draft FFS Remedies
Section IV of the CPG document discusses the CPG's proposed alternative remedy. The CPG argues that targeted areas within the river are responsible for much of the human and ecological risk because they contain much of the persistent contaminants of concern (COCs) at concentrations in sediments significantly above urban background levels. The CPG states that these areas also represent potential ongoing sources of impact to other locations of the river through erosion and diffusion to the water column. The CPG proposes that these sediments should be considered to be the focus of any remedial activities that address human health and the environment for the entire LPRSA. The CPG indicates that the sediments in non-target areas are stable and do not present unacceptable risks and should be left alone.

The CPG's preliminary analysis indicates that the predominant risk driver in the LPRSA can be reduced by approximately 80 percent by focusing on less than 150 acres of the LPRSA and by removing less than 450,000 cubic yards of dioxin-contaminated sediments. The CPG states that this alternative approach minimizes potential recontamination from the upper 9 miles of river, limits sediment resuspension from dredging and can be completed in less time than the proposed alternatives in the Draft FFS.

The CPG's alternative remedy focuses on the main risk driver (dioxins) and seems to assume that other contaminants in areas not targeted for removal will recover through natural processes.

On page 38 of the CPG document, it appears that the CPG is proposing to remove sediments that contain dioxins at levels of 500 to 1000 parts per trillion.

The CPG states that sediment cores consistently show that elevated concentrations of contaminants that are buried at depth in the sediment bed have remained stable for decades. These sediments continue to remain stable today, as evidenced by relatively shallow erosion during the passage of Hurricane Irene, a greater than 100-year storm event. The CPG believes the data indicate no human health or ecological risk from older, stable sediments.
The CPG states that the data indicate that dioxins and PCBs decreased by approximately 40 percent between river miles 1 to 7 between 1995 and 2008.

Appendices

Appendix 1 of the CPG document presents a comparison of the Draft FFS and the alternative remedy, with respect to their consistency with contaminated sediment principles.

Appendix 2 of the CPG document identifies bridges and other infrastructure that may complicate dredging plans and cause EPA's estimate for completion of dredging for the Draft FFS alternatives to be underestimated by several years.

Appendix 3 of the CPG document compares EPA's and the CPG's estimates of the time needed to dredge river miles 0 to 8.

Appendix 4 of the CPG document presents a list of references.

Appendix 5 of the CPG document is a February 2011 letter to the Contaminated Sediment Technical Advisory Group (CSTAG) that contains the CPG's comments on the EPA's briefing memo to CSTAG.

Issues

1. The CPG indicates that EPA is not considering all relevant data. The CAG may want to review any available data that are not considered for the FFS. The CAG may want to discuss with EPA whether any data not considered are likely to affect the preferred remedy selected by EPA.
2. The CGP and EPA appear to have different opinions about the extent of natural recovery that is occurring and that may occur in the future. The CAG may want additional information about how natural recovery is estimated.
3. The CPG indicates that the model used by EPA does not adequately replicate existing conditions and it is likely to produce unreliable results. The CAG may want additional information about the model, assumptions and modeling process used by EPA.
4. The CPG indicated that EPA's dredging pilot study is flawed and likely to underestimate dredging production rates because the study failed to account for actual field conditions, such as bridge clearances. The CAG may want to obtain more information about the accuracy of predicted dredging production rates.
5. The CPG raises the issue of recontamination of the lower 8 miles of river from upstream sources. The 2007 Draft FFS does not discuss recontaminated by the upper 9 miles of river. The CAG may want to ask EPA if recontamination from upstream sources is probable.
6. The CPG disagrees with the statement on page 8 of EPA's stakeholder summary that resuspension of FFS Area sediments from tidal activity and scouring during high flow events is the primary ongoing source of contamination of the FFS study area. The CAG may want to ask EPA to further explain the data that supports EPA's conclusions about the source of contamination. The CAG may want to understand what, if any, assumptions EPA and the CPG are making to reach their different conclusions about the ongoing source of contamination.
7. The 2007 Draft FFS includes human health risk assessment from fish consumption, but there is no information about risk from other recreational activities. Is risk from fish

consumption the main concern of the CAG? Are there other recreational activities, such as swimming, that are a concern? The CAG may want to ask if EPA can provide human health risk information for other recreational activities if knowing the risks would affect CAG input into the decision-making.

8. In a letter to the NRRB, the Baykeeper indicated the desire for a navigational channel for the lower Passaic River. The 2007 FFS discusses depths required for navigation for different sections of the lower 8 miles of the river. The CAG may want to discuss with EPA if and how the proposed remedy will accomplish both environmental cleanup and a navigational channel.
9. The CAG may want more information about how EPA's proposed cleanup alternatives for the lower 8 miles of the river will affect daily life of the surrounding community.

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